

ABSTRACT

The present invention provides a light exposure apparatus, and its method, comprising: an illumination optical system including: a light source array formed of a plural separate light sources arranged one-dimensionally or two-dimensionally; condensing optical system for condensing light emitted from each light source of the light source array; a light integrator for spatially decomposing the light condensed by the condensing optics, and thus generating a multitude of pseudo-secondary light sources; and a condenser lens for overlapping the light rays emitted from the multitude of pseudo-secondary light sources generated by the light integrator, and thus illuminating an illumination target region having a pattern to be exposed; and a projection optical system for projecting transmitted or reflected light onto an exposure target region of an exposure target object in order to expose the pattern to be exposed that is illuminated by the illumination optical system.